

INTERSTATE TECHNICAL GROUP ON ABANDONED UNDERGROUND MINES

5TH Biennial Workshop

TRB Information Update

L. Rick Ruegsegger, P.E
Special Projects Coordinator
Office of Geotechnical Engineering



TRB Subcommittee on Abandoned Underground Mines Update

(TRB Subcommittee AFP10(3))

New Subcommittee Designation

- The TRB has re-designated all of its committees and subcommittees.
- The Parent Committee for Engineering Geology is referred to as committee APF10 (It was formerly designated as Committee A2L05.)
- Our Subcommittee on Abandoned Underground Mines is now correspondingly designated as subcommittee AFP10(3). (It was formerly designated as Subcommittee A2L05(3).)

Summary of 2004 Subcommittee Meeting

Meeting Date: Monday, January 12, 2004

The Guidelines for Geophysical Investigations of Mines Under Highways report, which was a product of the GUE-70-14.10 Mine Research project completed by ODOT in June 2003, was circulated

- 5th Biennial ITGAUM Meeting, Tucson, Arizona, April, 2004 was discussed by Tom Lefchik and myself.
- Bob Henthorne announced that the Mid-year TRB Meeting at the Highway Geology Symposium (HGS) would be about drilling, coring and sampling methods.

Summary of 2004 Subcommittee Meeting

- The HGS will be held in Kansas City in September 2004 (See this web address for details: <http://www.hgs55.com>)
- *Research Pays Off* articles for TR News were discussed by Tom Lefchik (FHWA, Ohio Division).
- Future synthesis topics were discussed.
- 25 persons attended the subcommittee meeting

Summary of 2004 Subcommittee Meeting

Technical presentations included:

- High Resolution Seismic Survey of Salt Mines in Central Kansas (Bob Henthorne, KDOT) Bob made an excellent presentation about KDOT's efforts performing high resolution seismic survey techniques to define the lateral extent, depth and size of salt dissolution features.
- Geophysical Void Detection and Mining MSHA Initiatives (George Gardner, MSHA). These MSHA initiatives, which are the result of the recent Quecreek Mine Inundation in Pennsylvania, have the potential to define practical applications of geophysics to detect mine voids under our state roadways. This MSHA-funded work has the potential to produce valuable information which could benefit future geotechnical investigations.

Technical Session # 528

“ Ground Subsidence ”

Tuesday, January 13, 2004,

- Organized and Moderated by members of the AFP10(3) Subcommittee on Abandoned Underground Mines
- Co-Sponsored by the Committee for Engineering Geology (AFP10) and the Committee for Exploration and Classification of Earth Materials (AFP20)
- Attended by approximately 40 persons.

Summary of Technical Session #528

Technical presentations included:

- *Real Time Monitoring of Subsidence over Abandoned Mines in Virginia Using Time-Domain Reflectometry* (Kevin O'Connor, GeoTDR, Inc.)
- *Application of Wavelets in Detection of Cavities Under Pavements by Surface Waves* (Parisa Shokouhi, Rutgers Univ.)
- *Measurements of In-Situ Hydraulic Conductivity and Coefficient of Consolidation Using Prefabricated Vertical Drains* (Brian Devine, Villanova Univ.)

Activities Since the January 2004

TRB Annual Meeting

Synthesis Topics Received Since the Subcommittee Meeting

- Avalanche Control and Detonation
- Effects of forest Fires on Slope Stability
- Aesthetics of Slopes After Roadway Construction or Repairs to Existing Slopes
- Databases Structured to Provide Usage by Many Organizations through the Inclusion of Certain Basic Types of Information
- Best Practices Manual For Abandoned Underground Mine Investigations and Remediation

Request for Subcommittee Continuance

- A Request for Continuance was required to be submitted to the TRB by March 1, 2004 in order to continue the subcommittee's existence.
- The required Request for Continuance was submitted to the Chairman of the TRB Engineering Geology Committee on February 19, 2004.

Subcommittee Scope

Objectives:

- Facilitate the free flow of information related to abandoned underground mines
- Encourage dialogue among, and provide a technical forum for, states, governmental agencies and private sector entities with similar interests.

Subcommittee Scope

Benefits:

- Unique opportunity for technical dialog, informational exchange, potential partnering in problem solving, and possibility of shared research
- Improved efficiency and effectiveness of operations of state departments of transportation and safety of the traveling public
- Opportunity to identify and develop research problem statements and synthesis topics.

Subcommittee Scope

Term:

- 3 years from the date of approval by Section AFP00.
- At the end of this 3 year term, the need for continuation of the subcommittee will again be assessed.

Other TRB Committees / Subcommittees

- AFP10 Engineering Geology Committee (Chairman: Tom Badger, Washington DOT; Parent Committee of the Subcommittee)
- AFP20 Exploration and Classification of Earth Materials Committee (Chairman: Bob Henthorne, KDOT; Parent Committee for the Geophysics Subcommittee;)
- AFP20(1) Geophysics Subcommittee (Chairman: Matt DeMarco, FHWA Central Federal Lands)

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